Figure 1

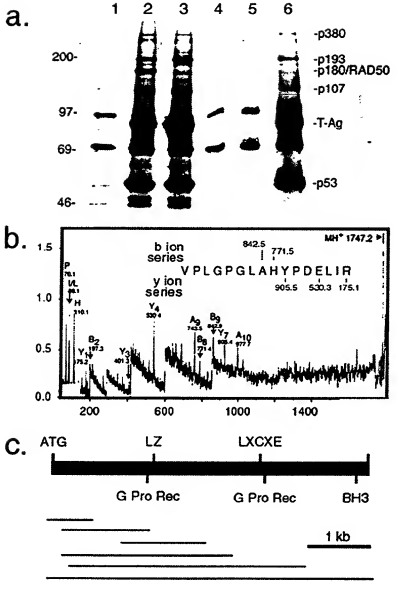

a.
1
2
3
4
5
6
200-
97-
69-
46-
-p380
-p193
-p180/RAD50
-p107
-T-Ag
-p53
b.
b ion series
y ion series
VPLGPGLAHYPDELIR
MH+ 1747.2
842.5
771.5
905.5
530.3
175.1
1.5
1.0
0.5
0.0
200
600
1000
1400
c.
ATG
LZ
LXCXE
G Pro Rec
G Pro Rec
BH3
1 kb

FIGURE 2

a.

```
MVGELRYREFRVPLGPGLHAYPDELIRQRVGHNGHPEYQIRWLILRRGDD     50
GDRDSTVDCKAEHILLWMSDDEIYANCHKMLGENGQVIAPSRESTEAGAL    100
DKSVLGEMETDVKSLIQRALRQLEECVGTVPPAPLLHTVHVLSAYASIEP    150
LTGIFKDRRVVNLLMHMLSSPDYQIRWSAGRMIQALSSHDAGTRTQILLS    200
LSQQEAIEKHLDFDSRCALLALFAQATLTEHPMSFEGVQLPQVPGRLLFS    250
LVKRYLHVTFLLDRLNGDAGDQGAQNNFSPEELNVGRGRLELEFSMAMGT    300
LISELVQAMRWDGASSRPESSSSSTFQPRPAQFRPYTQRFRRSRRFRPRA    350
SFASFNTYALYVRDTLRPGMRVRMLENYEEIAAGDEGQFRQSNDGVPPAQ    400
VLWDSTGHTYWVHWHMLEILGFEEDIEDVIDIEELQELGANGALSIVPPS    450
QRWKPITQLFAEPYVVPEEEDREESENLTQAEWWELLFFIRQLSEAERLH    500
IVDLLQDHLEEERVLDYDMLPELTVPVDLAQDLLLSLPQQLEDSALRDLF    550
SCSVYRKYGPEVLVGHLSYPFVPGAQPNLFGANEESEAKDPPLQSASPAL    600
QRLVESLGPEGEVLVELEQALGSEAPQETEVKSCLLQLQEQPQPFLALMR    650
SLDTSASNKTLHLTVLRILMQLVNFPEALLLPWHEAMDACVTCLRSPNTD    700
REVLQELIFFLHRLTTTSRDYAVILNQHGARDAISKVLEKHRGKLELAQE    750
LRDMVSKCEKHAHLYRKLTTNILGGCIQMVLGQIEDHRRTHRPIQIPFFD    800
VFLRYLCQGSSEEMKKNRYWEKVEVSSNPQRASRLTDRNPKTYWESSGRA    850
GSHFITLHMRPGVIIRQLTLLVAGEDSSYMPAWVVVCGGNSIKSVNKELN    900
TVNVMPSASRVTLLENLTRFWPIIQIRIKRCQQGGINTRIRGLEVLGPKP    950
TFWPVFREQLCRHTRLFYMVRAQAWSQDIAEDRRSLLHLSSRLNGALRHE   1000
QNFAERFLPDMEAAQALSKTCWEALVSPLVQNITSPDEDSTSSLGWLLDQ   1050
YLGCREAAYNPQSRAAAFSSRVRRLTHLLVHVEPREAAPPVVAIPRSKGR   1100
NRIHDWSYLITRGLPSSIMKNLTRCWRSVVEEQMNKFLSASWKDDDFVPR   1150
YCERYYVLQKSSSELFGPRAAFLLAMRNGCADAVRRLPFLRAAHVKQQFA   1200
RHIDQRIQGSRMGGARGMEMLAQLQRCLESVLIFSPLEIATTFEHYYQHY   1250
MADRLLSVGSSWLEGAVLEQIGPCFPSRLPQQMLQSLNVSEELQRQFHVY   1300
QLQQLDQELLKLEDTEKKIQVAHEDSGREDKSKKEEAIGEAAAVAMAEEE   1350
DQGKKEGEEEGEGEDEEEERYYKGTMPEVCVLVVTPRFWPVASVCQMLN   1400
PATCLPAYLRGTINHYTNFYSKSQSRSSLEKEPQRRLQWTWQGRAEVQFG   1450
GQILHVSTVQMWLLLHLNNQKEVSVESLQAISELPPDVLHRAIGPLTSSR   1500
GPLDLQEQKNVPGGVLKIRDDSEEPRPRRGNVWLIPPQTYLQAEAEEGRN   1550
MEKRRNLLNCLVVRILKAHGDEGLHVDRLVYLVLEAWEKGPCPARGLVSS   1600
LGRGATCRSSDVLSCILHLLVKGTLRRHDDRPQVLYYAVPVTVMEPHMES   1650
LNPGSAGPNPPLTFHTLQIRSRGVPYASCTDNHTFSTFR              1689
```

b.

```
p193:     LKAHGDE
Hrk:      LKALGDE
Bim:      LRRIGDE
Bik:      LACIGDE
Bid:      LAQIGDE
Blk:      LACIGDE
EGL-1:    LAAMCDD
BAD:      LRRMSDE
BNIP-3:   LKKNSDW
```

Figure 3

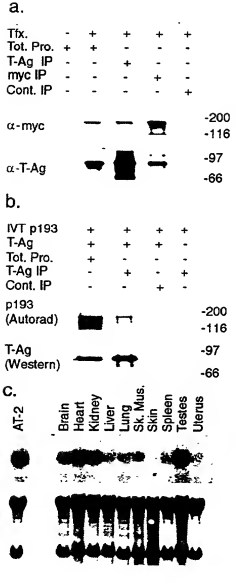

a.
Tfx. - + + + +
Tot. Pro. + + - - -
T-Ag IP - - + - -
myc IP - - - + -
Cont. IP - - - - +
α-myc
α-T-Ag
-200
-116
-97
-66
b.
IVT p193 + + + +
T-Ag + + + -
Tot. Pro. + - - -
T-Ag IP - + - +
Cont. IP - - + -
p193 (Autorad)
T-Ag (Western)
-200
-116
-97
-66
c.
AT-2
Brain
Heart
Kidney
Liver
Lung
Sk. Mus.
Skin
Spleen
Testes
Uterus

Figure 4

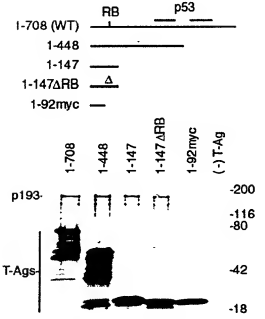

RB
p53
I-708 (WT)
1-448
1-147
1-147ΔRB
Δ
1-92myc
1-708
1-448
1-147
1-147ΔRB
1-92myc
(-) T-Ag
p193
T-Ags
-200
-116
-80
-42
-18

Figure 5.

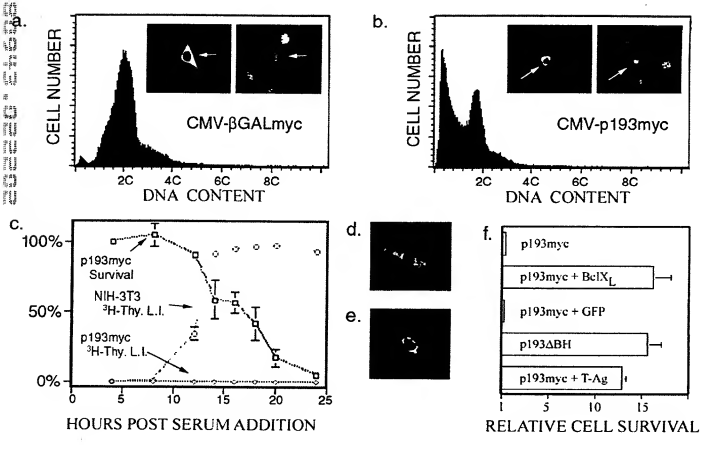

a.
CELL NUMBER
CMV-βGALmyc
2C 4C 6C 8C
DNA CONTENT
b.
CELL NUMBER
CMV-p193myc
2C 4C 6C 8C
DNA CONTENT
c.
100%
50%
0%
p193myc Survival
NIH-3T3 ³H-Thy. L.I.
p193myc ³H-Thy. L.I.
0 5 10 15 20 25
HOURS POST SERUM ADDITION
d.
e.
f.
p193myc
p193myc + BclX$_L$
p193myc + GFP
p193ΔBH
p193myc + T-Ag
1 5 10 15
RELATIVE CELL SURVIVAL

Figure 6

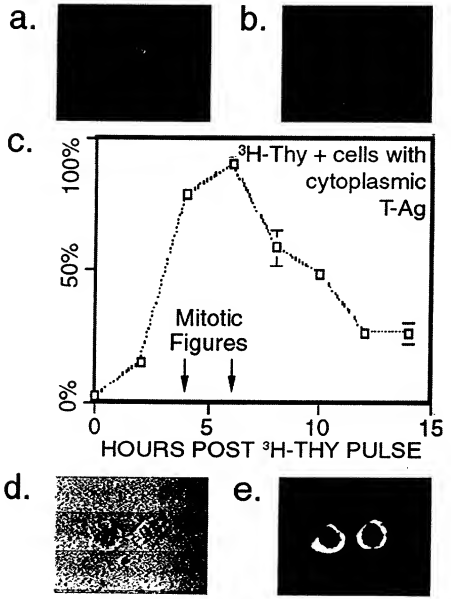
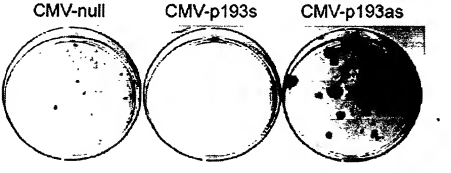

a.
b.
c.
100%
50%
0%
^{3}H-Thy + cells with cytoplasmic T-Ag
Mitotic Figures
0
5
10
15
HOURS POST ^{3}H-THY PULSE
d.
e.

Figure 7.

A. NIH-3T3 colony growth assay:
- -Transfect with various constructs
- -Impose G418 selection
- - Stain with gentian violet



B. RT-PCR analysis:

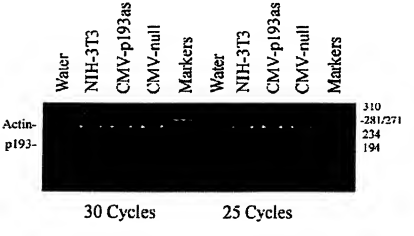
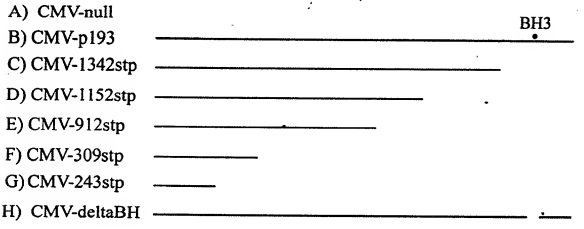


Figure 8.

A: Structure of CMV expression vectors with nested p193 C-terminal truncations.



B: Colony growth assay.

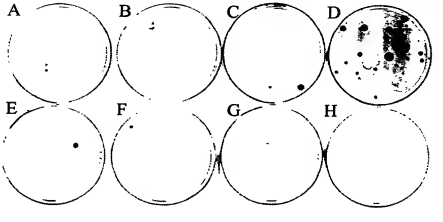


Figure 8C

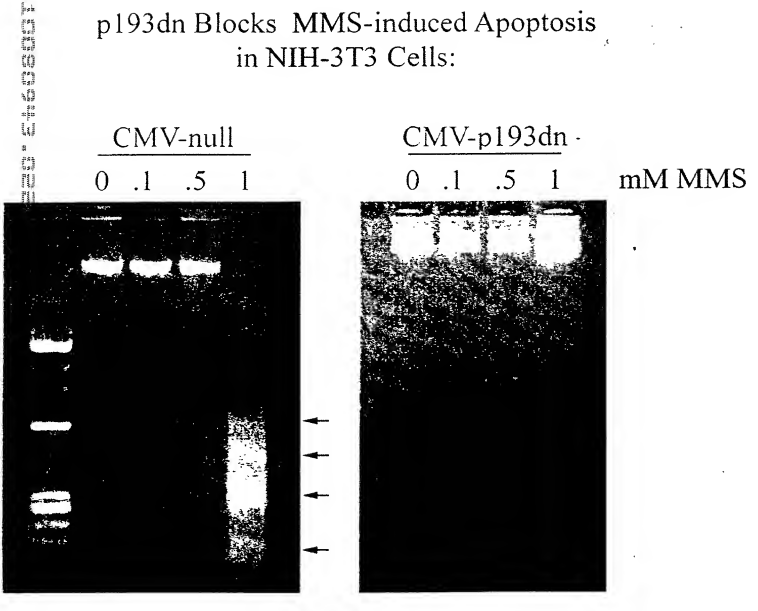

p193dn Blocks MMS-induced Apoptosis
in NIH-3T3 Cells:
CMV-null
0 .1 .5 1
CMV-p193dn
0 .1 .5 1
mM MMS

Figure 9.

MHC-p193dn Transgene

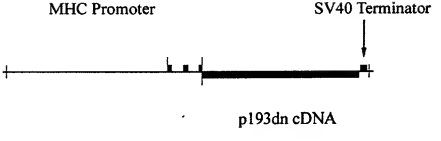


Figure 10.

Northern Blot of transgene expression in MHC-p193dn transgneic mice

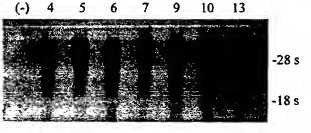


Figure 11.

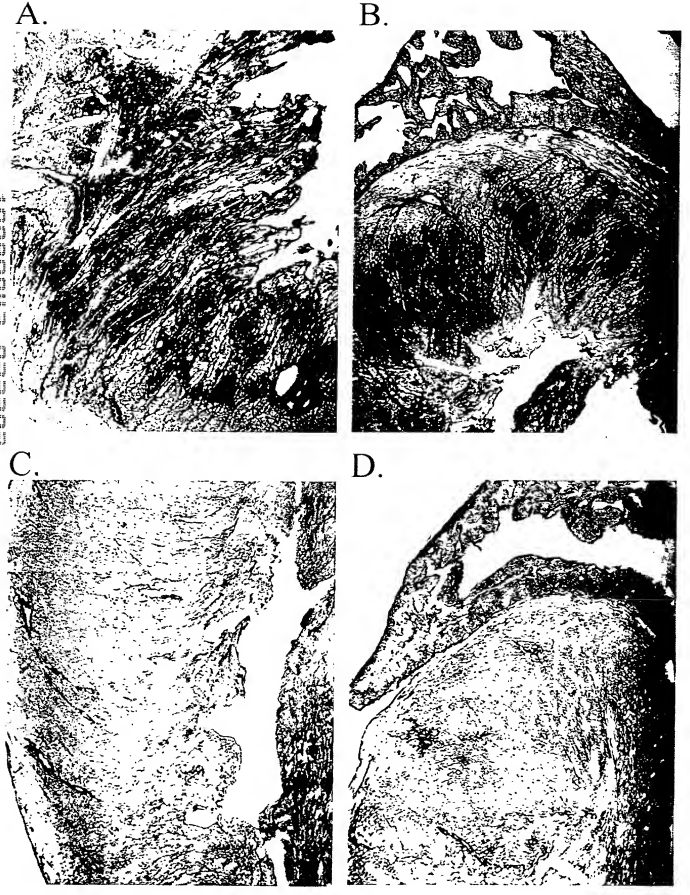


Figure 12

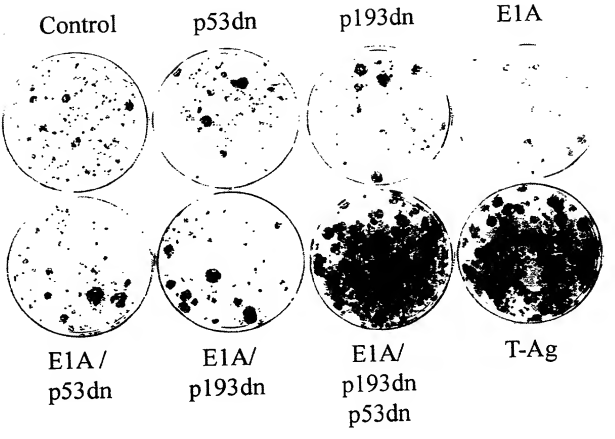
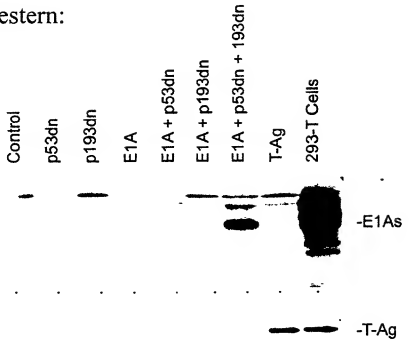

Control
p53dn
p193dn
E1A
E1A / p53dn
E1A/ p193dn
E1A/ p193dn p53dn
T-Ag

Figure 13

A) Western:

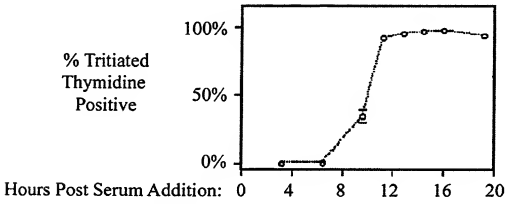


B) DNA Fragmentation:

Figure 14

p193 is Expressed in G_1/S of the Cell Cycle:

A) Cell Cycle Syncronization:



B) Western Analysis of p193 Expression:

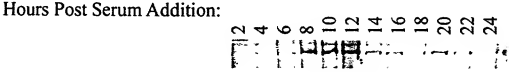


Figure 15

Isoproternol induces growth in cardiomyocytes which co-express p193dn and p53dn.

- ISO + ISO